=> d l7 ibib kwic 1-
YOU HAVE REQUESTED DATA FROM 4 ANSWERS - CONTINUE? Y/(N):y

L7 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:116590 CAPLUS
DOCUMENT NUMBER: 140:309328
TITLE: Crosslinking structures of gelatin hydrogels crosslinked with genipin or a water-soluble carbodiimide
AUTHOR(S): Liang, Huang-Chien; Chang, Wen-Hisung; Liang, Hsiang-Fa; Lee, Meng-Horng; Sung, Hsing-Wen
CORPORATE SOURCE: Department of Chemical Engineering, National Tsing Hua University, Hsinchu, 30013, Taiwan
SOURCE: Journal of Applied Polymer Science (2004), 91(6), 4017-4026
CODEN: JAPNAB; ISSN: 0021-8995
PUBLISHER: John Wiley & Sons, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 38 THERE ARE 38 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB It was suggested in our previous studies that carbodiimide- and genipin-crosslinked **gelatin** hydrogels could be used as bioadhesives to overcome the cytotoxicity problem associated with formaldehyde-crosslinked **gelatin** hydrogels. In this study, we investigated the crosslinking structures of carbodiimide- and genipin-crosslinked **gelatin** hydrogels. We found that crosslinking **gelatin** hydrogels with carbodiimide or genipin could produce distinct crosslinking structures because of the differences in their crosslinking types. Carbodiimide could form intramol. crosslinks within a **gelatin** mol. or short-range intermol. crosslinks between two adjacent **gelatin** mols. On the basis of gel permeation chromatog., we found that the polymerization of genipin mols. could occur under the conditions used in crosslinking **gelatin** hydrogels via a possible aldol condensation. Therefore, besides intramol. and short-range intermol. crosslinks, addnl. long-range intermol. crosslinks could be introduced into genipin-crosslinked **gelatin** hydrogels. Crosslinking a **gelatin** hydrogel with carbodiimide was more rapid than crosslinking with genipin. Therefore, the gelation time for the carbodiimide-crosslinked **gelatin** hydrogels was significantly shorter than that of the genipin-crosslinked **gelatin** hydrogels. However, the cohesive (interconnected) structure of the carbodiimide-crosslinked **gelatin** hydrogels was readily broken because, unlike the genipin-crosslinked **gelatin** hydrogels, there were simply intramol. and short-range intermol. crosslinks present in the carbodiimide-crosslinked hydrogel. In the cytotoxicity study, the carbodiimide-crosslinked **gelatin hydrogels** were dissolved into small **fragments** in the cultural medium within 10 min. In contrast, the genipin-crosslinked **gelatin** hydrogels remained intact in the medium throughout the entire course of the study. Again, this may be attributed to the differences in their crosslinking structures. The genipin-crosslinked **gelatin** hydrogels were less cytotoxic than the carbodiimide-crosslinked **gelatin** hydrogels.

L7 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1998:507370 CAPLUS
DOCUMENT NUMBER: 129:202126
TITLE: Growth and viability of mycelial fragments of white-rot fungi on some hydrogels
AUTHOR(S): Lestan, D.; Lestan, M.; Lamar, R. T.
CORPORATE SOURCE: Forest Products Laboratory, Institute for Microbial and Biochemical Technology, USDA Forest Service, WI, 53705-2398, USA
SOURCE: Journal of Industrial Microbiology & Biotechnology (1998), 20(3/4), 244-250
CODEN: JIMBFL; ISSN: 1367-5435
PUBLISHER: Stockton Press
DOCUMENT TYPE: Journal

LANGUAGE: English
REFERENCE COUNT: 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB The viability of mycelial fragments of Trametes versicolor and Irpex lacteus and their growth on selected hydrogels are described. The size of mycelial fragments of the fungi did not significantly influence their viability. Alginate hydrogel films supported fungal growth better than agarose, carrageenan, chitosan and **gelatin** films, and had the highest mech. strength but were less hydrophilic than the other hydrogels. All com. alginates that were tested supported aseptic growth of fungal **fragments** without prior sterilization of the **hydrogel** solution The viability of mycelial **fragments** in the **hydrogel** solns. was higher for some com. alginates than that in laboratory grade alginate. The mech. strength and hydrophilicity of hydrogels from alginate type Sobalg FD 155 and Meer HV were comparable to that of laboratory grade alginate. Sterilization and pH of the alginate hydrogel did not significantly influence the growth of T. versicolor mycelial fragments but affected the growth of I. lacteus. Concns. of alginate in the range of 1-2% in the hydrogel did not affect the growth of entrapped mycelial fragments of these fungi.

L7 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1998:163488 CAPLUS
DOCUMENT NUMBER: 128:208937
TITLE: Fragmented polymeric hydrogels for adhesion prevention and their preparation
INVENTOR(S): Wallace, Donald G.; Reich, Cary J.; Shargill, Narinder S.; Vega, Felix; Osawa, A. Edward
PATENT ASSIGNEE(S): Fusion Medical Technologies, Inc., USA
SOURCE: PCT Int. Appl., 54 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9808550	A1	19980305	WO 1997-US15262	19970814
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
CA 2264647	AA	19980305	CA 1997-2264647	19970814
AU 9742412	A1	19980319	AU 1997-42412	19970814
AU 719534	B2	20000511		
EP 927053	A1	19990707	EP 1997-940692	19970814
EP 927053	B1	20030402		
R: BE, CH, DE, ES, FR, GB, IT, LI, NL, IE				
BR 9711241	A	19990817	BR 1997-11241	19970814
JP 2002515086	T2	20020521	JP 1998-511970	19970814
RU 2207882	C2	20030710	RU 1999-106523	19970814
IL 128496	A1	20040620	IL 1997-128496	19970814
PRIORITY APPLN. INFO.:			US 1996-704852 A	19960827
			US 1997-903674 A	19970731
			WO 1997-US15262 W	19970814

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

IT Acrylic polymers, biological studies
Albumins, biological studies
Biopolymers
Caseins, biological studies
Collagens, biological studies
Elastins

Fibrinogens
Fibrins
Fibronectins
Gelatins, biological studies
Glycosaminoglycans, biological studies
Hemoglobins
Keratins
Laminins
Polyesters, biological studies
Polymers, biological studies
Polyoxyalkylenes, biological studies
Polysaccharides, biological studies
Proteins, general, biological studies
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(**fragmented** polymeric **hydrogels** for adhesion prevention)

L7 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1997:284 CAPLUS
DOCUMENT NUMBER: 126:37149
TITLE: Injectable hyaluronic acid-containing dual-phase compositions, particularly useful in corrective and plastic surgery
INVENTOR(S): Debacker, Yves; Villain, Franck; Jallet, Valerie
PATENT ASSIGNEE(S): W.K. Et Associes, Fr.; Debacker, Yves; Villain, Franck; Jallet, Valerie
SOURCE: PCT Int. Appl., 19 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: French
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
WO 9633751	A1	19961031	WO 1996-FR636		19960425
W: AU, BR, CA, JP, US					
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE					
FR 2733426	A1	19961031	FR 1995-5181		19950425
FR 2733426	B1	19970718			
FR 2733427	A1	19961031	FR 1996-5224		19960425
FR 2733427	B1	20010525			
AU 9657667	A1	19961118	AU 1996-57667		19960425
PRIORITY APPLN. INFO.:			FR 1995-5181	A	19950425
			WO 1996-FR636	W	19960425

AB Dual-phase compns. containing a polymer selected from hyaluronic acid and its salts, methods for preparing the compns., and a filler material useful in corrective and plastic surgery are described. The compns. comprise an injectable suspension with a dispersed phase composed of insol. **fragments** of a **hydrogel** of the strongly crosslinked polymer and a continuous phase composed of an aqueous solution of the polymer and/or another biocompatible polymer, selected from proteins, **polysaccharides** and derivs. which are noncrosslinked or weakly crosslinked. A biphasic composition was prepared from sodium hyaluronate (mol. weight 2 x 106) fibers of bacterial origin and dissolved in 0.25M NaOH solution 1,4-Bis(2,3-epoxypropoxy)butane, a crosslinker, was added to the above solution The mixture was homogenized and heated at 50° for 2 h to give a solid hydrogel. The **hydrogel** was purified to give solid **fragments** with an average particle size of 75-250 μm.

L10 ANSWER 8 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1983:559449 CAPLUS
DOCUMENT NUMBER: 99:159449
TITLE: Water-soluble acrylic polymer powder
PATENT ASSIGNEE(S): Sumitomo Chemical Co., Ltd., Japan
SOURCE: Jpn. Kokai Tokkyo Koho, 6 pp.
CODEN: JKXXAF
DOCUMENT TYPE: Patent
LANGUAGE: Japanese
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 58061105	A2	19830412	JP 1981-160607	19811007
PRIORITY APPLN. INFO.:			JP 1981-160607	19811007

AB Water-soluble polymer powder is prepared by polymerizing water-soluble acrylic compds. in H2O, pulverizing the polymer **hydrogel**, and drying in the presence of thiosalicylic acid (I) [147-93-3], thiomalic acid (II) [70-49-5], or water-soluble salts of I or II. Thus, a 40% solids 9:1 acrylamide-Na acrylate copolymer (III) [25085-02-3] **hydrogel** (intrinsic viscosity at 30° in 1 N NaNO3 23.3) was cut to 3-7 mm diameter **particles**, treated with a 20% aqueous Na2SO3 (stabilizer, 5% on III) solution and a 20% aqueous Na thiosalicylate (IV) [134-23-6] (2% on III) solution, and dried 90 min at 100° to give 2-5 mm-diameter III pellets having excellent solubility in H2O and intrinsic viscosity 23.1. When IV was omitted, similarly dried III contained large **amts**. of **water**-insol. gel.

L10 ANSWER 7 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN DUPLICATE 1
ACCESSION NUMBER: 1987:412818 CAPLUS
DOCUMENT NUMBER: 107:12818
TITLE: Calcium-induced gelation of alginic acid and pH-sensitive reswelling of dried gels
AUTHOR(S): Yotsuyanagi, Toshihisa; Ohkubo, Tsuneo; Ohhashi, Takafumi; Ikeda, Ken
CORPORATE SOURCE: Fac. Pharm. Sci., Nagoya City Univ., Nagoya, 467, Japan
SOURCE: Chemical & Pharmaceutical Bulletin (1987), 35(4), 1555-63
CODEN: CPBTAL; ISSN: 0009-2363
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Ca-induced Na alginate gelation was examined in terms of water content changes. The gelation was accompanied with considerable water loss, which reached about 50-60% (weight/weight) reduction in the fully-cured state. The Ca association with the polymer was strong enough to maintain the shape of fully-cured beads in distilled **water** and the **amt**. of the ions associated with the alginate used was 1.6 + 10-3 mol/g of polymer. The diffusion coeffs. of several model compds. having mol. wts. ranging from 122 to 1050 were estimated as a function of the polymer concentration in the fully-cured beads. The swelling property of dried gel **particles** prepared from fully-cured **hydrogels** was of interest; the **particles** remained unchanged in distilled water or acidic medium (pH 1.5 KCl-HCl) but swelled rather rapidly in pH 7.0 phosphate buffer to a size greater than their original size before being dried. Such a pH-sensitive swelling property could be advantageous for orally-administered drug vehicles, especially when an acid-sensitive drug is incorporated in the gel.

L10 ANSWER 3 OF 10 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2004:517238 CAPLUS
DOCUMENT NUMBER: 141:332540
TITLE: Particle-forming precipitation polymerization under unusual conditions
AUTHOR(S): Takahashi, T.; Fukazawa, H.; Kawaguchi, H.
CORPORATE SOURCE: Faculty of Science and Technology, Keio University, Yokohama, 223-8522, Japan
SOURCE: Progress in Colloid & Polymer Science (2004), 124, 164-167
CODEN: PCPSD7; ISSN: 0340-255X
PUBLISHER: Springer
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB Precipitation polymerization of N-isopropylacrylamide (NIPAM) with a small **amt.** of crosslinker in **water** gave monodisperse thermosensitive **hydrogel particles** at 70 °C but not at 50 °C. Monodisperse **hydrogel particles** could be obtained even at 50 °C when co-nonsolvent systems such as ethanol/water were used as the polymerization medium. Polymerization in ethanol/water mixture gave poly-NIPAM **particles** even at room temperature In this type of polymerization, stirring was unnecessary for the formation of **particles**. **Particles** prepared in ethanol/water were highly swellable. This was due to frequent chain transfer reaction in which ethanol takes part, resulting in low-mol.-weight polymers and low crosslinking efficiency. DMSO/water mixture is also suitable for giving similar kinds of **particles**. However, it is unclear whether the mechanism of **particle** formation is the same as in ethanol/water mix

```
=> d his full

     (FILE 'HOME' ENTERED AT 17:33:40 ON 19 MAY 2005)

     FILE 'CAPLUS' ENTERED AT 17:33:51 ON 19 MAY 2005

     FILE 'CAPLUS' ENTERED AT 17:35:26 ON 19 MAY 2005
L1            25 SEA ABB=ON  PLU=ON  HYDROGEL (5A) (FRAGMENT OR FRAGMENTED OR
                 WATER FREE OR AQUEOUS FREE)
L2             0 SEA ABB=ON  PLU=ON  HYDROGEL (5A) (FRAGMENT OR FRAGMENTED) AND
                 (WATER FREE OR AQUEOUS FREE)
L3             2 SEA ABB=ON  PLU=ON  HYDROGEL (5A)  (WATER FREE OR AQUEOUS
                 FREE)
                 D L3 IBIB KWIC 1-
L4             2 SEA ABB=ON  PLU=ON  HYDROGEL (5A) (FRAGMENT OR FRAGMENTED) AND
                 (SYRINGE OR PISTON OR EXTRUD?)
L5            23 SEA ABB=ON  PLU=ON  HYDROGEL (5A) (FRAGMENT OR FRAGMENTED)
L6             7 SEA ABB=ON  PLU=ON  HYDROGEL (5A) (FRAGMENT OR FRAGMENTED) (P)
                 (GELATIN OR COLLAGEN OR POLYSACCHARIDE OR POLYMER)
L7             4 SEA ABB=ON  PLU=ON  HYDROGEL (5A) (FRAGMENT OR FRAGMENTED) (P)
                 (GELATIN OR COLLAGEN OR POLYSACCHARIDE)
                 D L7 IBIB KWIC 1-Y
                 D L7 IBIB KWIC 1-

     FILE 'CAPLUS, MEDLINE, BIOSIS, LIFESCI' ENTERED AT 18:15:09 ON 19 MAY 2005
L8          2140 SEA ABB=ON  PLU=ON  HYDROGEL (P) (PARTICLE OR MICROPARTICLE OR
                 FRAGMENT OR FRAGMENTED)
L9            11 SEA ABB=ON  PLU=ON  HYDROGEL (P) (PARTICLE OR MICROPARTICLE OR
                 FRAGMENT OR FRAGMENTED) (P) WATER (5A) (AMOUNT OR CONTENET OR
                 PERCENTAGE)
L10           10 DUP REM L9 (1 DUPLICATE REMOVED)
                 D L10 IBIB KWIC 1-
```